EA

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,361	01/09/2002	Kenneth S. Ehrman	58886-00006USPT	6354

7590 09/21/2005

Jenkens & Gilchrist, P.C.
ANDRE M. SZUWALSKI
3200 Fountain Place
1445 Ross Aveune
Dallas, TX 75202-2799

EXAMINER	
KRAMER, JAMES A	

ART UNIT	PAPER NUMBER
3627	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/043,361	EHRMAN ET AL.	
	Examiner	Art Unit	
	James A. Kramer	3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 21-37* is/are pending in the application.

4a) Of the above claim(s) *21-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Newly submitted claims 21-37 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claims 1-9 are drawn to a system for communicating data between assets an a management station and claims 21-37 are drawn to an asset monitor. These sets of claims are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, the claims 1-9 do not require the asset monitor of claims 21-37 in order to communication data. See MPEP § 806.05(d).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-37 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, recites "a wireless device coupled to each of a plurality of assets". Examiner notes that this can be interpreted as (a) one device connected to several assets or (b) each asset

has it's own unique device attached to it. Examiner notes that because this limitation can be interpreted multiple ways, the claim fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner will interpret the claim as stated in option (b) above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen et al. in view of Microsoft Computer Dictionary.

Gilhousen et al. teaches an alternating sequential half duplex communication system. In particular, Gilhousen et al. teaches:

a management computing system including:

- a first computing unit for processing a first data set of the data,
- a first storage unit coupled to said first computing unit and having at least one database stored thereon for maintaining the first data set, and
- a first transceiver coupled to said first computing unit for communicating the first data set (Claim 1).

Examiner references Figure 1; 16 and 18; and column 5; line 67 – column 6; line 8, "one or more system user facilities in the form of central dispatch offices, message centers or communication offices 16 are tied through a telephonic, optical, satellite or other dedicated communication link to the Hub 14. In addition, for large numbers of remote customer message

centers, a message or network management center 18 can be employed to more efficiently control the priority, access, accounting and transfer characteristics of message data."

Examiner notes that the user facilities in the form of central dispatch offices, message centers or communication offices represent a management computing system. The transfer of message data represents a computing unit for processing a first data set (e.g. message data). The communication link between the user facilities for communicating message data and the Hub represents a transceiver (a device that both transmits and receives signals) for communicating the first data set.

Finally, Examiner asserts that for message data (first data set) to be sent from the user facilities (management computing system) to the Hub, the user facilities (management computing systems) necessarily contains a memory device which stores the message data (first data set). This inherent memory device represents a database for maintaining the first data set (message data). In support of the assertion of inherency above, Examiner notes that the system of Gilhousen et al. would be unable to function as disclosed (i.e. user facilities tied through a communication link to the Hub, column 5 line 67- column 6; line 3) without the user facilities (management computing systems) including a memory device (data base). As such a memory device (data base) is necessary to the user facility (management computing systems) as taught by Gilhousen et al.

Examiner notes that the analysis applied above further applies to storing and processing a first data set of the data on a first computing system (claim 10) and a means for storing and processing a first data set of the data on a first computing system (claim 19).

Gilhousen et al. teaches:

a wireless device coupled to an asset and including:

- a second computing unit for processing a second data set of the data,
- a second storage unit coupled to said second computing unit and having at least one database stored thereon for maintaining the second data set, and
- a second transceiver coupled to said second computing unit for communicating the second data set (claim 1).

Examiner references Figures 1 and 3 and notes that antenna 30 shows that the transceiver of Figure 3 is both wireless and attached to a truck (asset) (illustrated in Figure 1) .

Examiner references Figure 3 and column 13; lines 12-15, "The mobile transceiver or terminal 70 incorporates a low cost microprocessor or similar controller 74 for implementing signal processing, acquisition and demodulation functions." The microprocessor 74 represents Applicant's second computing unit for processing second data.

Examiner references Figure 3 and column 14; lines 15-17, "The decoded message bit may be temporarily store in a memory element 86." Examiner notes that memory element 86 represents second storage unit with a database for maintaining second data set.

Examiner references Figure 3 and column 12; lines 52-61, "In Figure 3, a transceiver 70 is shown for receiving and demodulating communication signals 24b from the Hub 14 and satellite 20 (shows a second transceiver for communicating the second data set). The transceiver 70 is connected to the antenna 30 through a diplexer 32 for receiving the satellite downlink signal 24b which is transferred into a demodulator 72 for demodulation into an encoded symbol stream (digital message)." Examiner notes that the digital message represents second data set, therefore the transceiver of Figure 3 which communicates the digital message represent Applicants second transceiver for communicating the second data set.

Examiner notes that the analysis applied above further applies to storing and processing a second data set of the data on a second computing system (claim 10) and a means for storing and processing a second data set of the data on a second computing system (claim 19).

Gilhousen et al. teaches

an infrastructure device including:

- a third computing unit for processing a third data set of the data,
- a third storage unit coupled to said third computing unit and having at least one database stored thereon for maintaining the third data set, and
- at least one third transceiver coupled to said third computing unit for communicating the first and third data sets with said first transceiver and the second and third data sets with said second transceiver, said at least one third transceiver being operable to communicate independently with each of said first and second transceivers.

Examiner notes that the Hub as taught in the previous arguments above represents Applicant's infrastructure device. Column 7; lines 14-17 states, "message data are transferred into the Hub . . . where they are converted into digital message signals." Examiner notes that this represents a third computing unit for processing a third set of data.

Further, column 17; lines 21-24 states, "Messages can be received directly as digital data at various bit rates and accumulated and stored for translation to a desired system transfer rate". Examiner notes that the accumulation and storage of the digital data represents a storage unit with database for maintaining the third data set.

Examiner once again references column 7; lines 14-17, ""message data are transferred into the Hub . . . where they are converted into digital message signals." Examiner also relies on the analysis provided above and again notes that;

1. message data represents first data set communicated between the transceiver of the management system (first transceiver) and the Hub (third transceiver) (Figure 1; 16 and 18; and column 5; line 67 – column 6; line 8); and
2. digital messages represent second data, communicated between the wireless device (second transceiver) and the Hub (third transceiver) (Figure 3 and column 12; lines 52-61).

Examiner notes that these two interactions (e.g. Hub with user facilities and Hub with wireless device) are completely independent. This is represented by the fact that they happen at different transaction rates.

Examiner notes that the analysis applied above further applies to storing and processing a third data set of the data on a third computing system (claim 10) and a means for storing and processing a third data set of the data on a third computing system (claim 19).

The analysis also applies to claim 10:

"communicating the first and third data sets between the first and third computing systems;

communicating the second and third data sets between the second and third computing systems

communicating between the first and third computing systems independently of communicating between the second and third computing systems"

As well as claim 19:

"means for communicating the first and third data sets between the first and third computing systems;

means for communicating the second and third data sets between the second and third computing systems

means for communicating between the first and third computing systems independently of communicating between the second and third computing systems"

Gilhousen et al. teaches that the communication between the (i) first and third and (ii) the second and third transceivers are asynchronous (claims 2 and 11) (column 7; lines 19-25). Examiner notes that Applicant fails to define asynchronous in the Specification. Therefore Examiner will apply the definition of asynchronous which is not happening at the same time (Webster's II New Riverside Dictionary). As such, Examiner interprets this claim to mean that communication (i) and communication (ii) do not happen at the same time. This is taught by Gilhousen et al. by the fact that transmission rates between the Hub (third) and the user facilities (first) and the Hub (third) and the wireless device (second) happen at different rates and that the Hub is able to store data for translation to a desired system transfer rate. Examiner notes that in order for the Hub receive and store data at one rate and then transfer the data at a different rate, the receiving and storing must be asynchronous.

Gilhousen et al. teaches that the second transceiver is a wireless transceiver (claim 3 and 12). Examiner once again references figures 1 and 3 and notes that the antenna 30 illustrates that the second transceiver is wireless.

Gilhousen et al. teaches the wireless device is an asset communicator (claims 4 and 13). Examiner references column 5; lines 30-33, "In Fig. 1 a communication system 10 is illustrated

having a mobile terminal mounted in a vehicle such as a truck 12." Examiner notes that this mobile terminal mounted in a truck represents an asset communicator.

Gilhousen et al. teaches the data sets include a temporal identifier (claims 5 and 14) Column 8; lines 9-24 states that "to decrease interference and accommodate a large number of terminals at potentially different burst rates, a Time Divisional Multiplexed (TDM) transmission scheme is used. The TDM approach divides the total transmitted (or received) spectrum into temporal increments or frames of predetermined length." Examiner notes that these temporal increments represents temporal identifiers.

Gilhousen et al. teaches wherein the assets include at least one of the following: military, commercial and personal (claims 6 and 15). Examiner notes that a truck is clearly one of these options (column 5; lines 30-32).

Gilhousen et al. teaches wherein the commercial equipment includes at least one of the following factory vehicles, automobiles, trucks, aircraft servicing equipment, boats, airplanes and machinery (claims 7 and 16). Examiner note that Gilhousen et al. teaches trucks (column 5; lines 30-32).

Gilhousen et al. teaches wherein the assets include at least one of fixed and mobile assets (claims 8, 17 and 20). Examiner notes that a truck is a mobile asset (column 5; lines 30-32).

Gilhousen et al. teaches wherein the second data set is a subset of the first and third data sets (claims 8 and 19). Examiner once again references column 7; lines 14-24 and notes that the message data (first data) is received at the Hub where they are converted (third data) into digital messages (second data). Examiner further notes that this conversion can include the accumulation or storage of the messages for translation (third data) to a desired system transfer rate. Examiner notes this teaching represents that the conversion (third data) by the Hub of the message data (first data) to digital messages (second data) represents the fact that the second data is a subset of the first and third data.

Gilhousen does not specifically teach that the database is a relational database. Microsoft computer Dictionary teaches that, "Microcomputer database products typically are relational databases."

It would have been obvious to one of ordinarily skill in the art at the time of the invention to modify the database of Gilhousen to be a relational database as taught by Microsoft Computer Dictionary in order to utilizes the typical software package.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Response to Arguments

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Kramer whose telephone number is (571) 272 6783. The examiner can normally be reached on Monday - Friday (8AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272 6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/14/05

ANDREW FISCHER
PRIMARY EXAMINER

James A. Kramer
Examiner
Art Unit 3627

jak